

Remarks

Claims 2-5 and 9-10 are pending in the application with claims 2 and 9 being the independent claims. Claims 2-5 and 9-10 have been rejected by the Examiner. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner has rejected claims 2-5 and 9-10 under 35 U.S.C. § 112, first paragraph, as allegedly not being described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. (Paper No. 25, page 2.) In support of the rejection, the Examiner has asserted that:

There is insufficient written description to show that Applicant was in possession of an antibody which binds to any 'purified 20kDa presenilin-2 C-terminal fragment'. The term 'purified 20kDa presenilin-2 C-terminal fragment' would include an essentially unlimited number of undefined compounds.

(*Id.*) For the following reasons, Applicants respectfully traverse the Examiner's rejection.

Contrary to the Examiner's assertion, the term "purified 20kDa presenilin-2 C-terminal fragment" does not include an essentially unlimited number of undefined compounds. The term, as used in the specification, refers to a discrete and specific fragment of the PS2 protein that is generated through the over-expression of PS2 in transfected cells. (Specification, page 49, lines 1-4.) In addition, as is disclosed in the

specification, the 20kDa presenilin-2 C-terminal fragment is also generated in PS2 inducible H4 cells induced to undergo apoptosis (*Id.* at page 50, lines 6-8). The specification teaches that the fragment is a cleavage product of the full-length PS2 protein or the 25kDa C-terminal fragment of PS2 (page 50, lines 12-16) and that the cleavage site is distal to the normal cleavage site of PS2. Both the enzyme responsible for cleavage (a CPP32-like protease) and the cleavage site (DSYDS or amino acids 326-330 of SEQ ID NO:1) are disclosed in the specification. (Specification, page 14, lines 21-25.) Further, the specification discloses that the N-terminus of the 20kDa presenilin-2 C-terminal fragment is PEMEED or PEMEEDSYD. (Page 15, lines 11-13.) In view of these teachings, the term "purified 20kDa presenilin-2 C-terminal fragment" does not encompass an unlimited number of fragments.

The Examiner's sole basis for rejecting the claims under 35 U.S.C. § 112, first paragraph, for lack of written description has been addressed by Applicants. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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